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10/073,152	02/13/2002	Karp-Sik Youn	P56636	4715

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EXAMINER

COLILLA, DANIEL JAMES

ART UNIT	PAPER NUMBER
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2854

DATE MAILED: 10/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

10/073,152

Applicant(s)

YOUN, KARP-SIK

Examiner

Dan Colilla

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18,20,21,23 and 24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,9-11,20 and 21 is/are rejected.
- 7) ☒ Claim(s) 4-8,12-18,23 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 Feb. 2002 and 21 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamamoto et al.

With respect to claim 1, Yamamoto et al. discloses an apparatus for discharging a sheet including a tray 6, a holder 7 supporting a printed sheet above the tray so that it is not in contact with the sheet on the tray as shown in Figure 1 of Yamamoto et al. Further disclosed is a moving means as described in paragraph 18 of the machine translation of Yamamoto et al. for moving the holder 7 in a horizontal direction with respect to the sheet discharge direction as shown by arrow 17.

With respect to claim 9, Yamamoto et al. discloses an apparatus for discharging a sheet including a tray 6, a pair of holders 7 and 8 supporting a printed sheet above the tray so that it is not in contact with the sheet on the tray as shown in Figure 1 of Yamamoto et al. Further disclosed is a moving means as described in paragraph 18 of the machine translation of Yamamoto et al. for moving the holders 7 and 8 in a horizontal direction with respect to the sheet discharge direction as shown by arrows 16 and 17.

3. Claim 20 is rejected under 35 U.S.C. 102(b) as being anticipated by Bortolotti et al.

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With respect to claim 20, Bortolotti et al. discloses an apparatus for discharging a sheet including a tray 14 and a pair of opposed movable holders 21 mounted on both sides of the tray 14 for supporting a sheet above the tray 14. Further disclosed is a moving means 31 for moving holders 21 so that the spacing between the holders changes width in order to support and then drop a sheet (Bortolotti et al., col. 3, lines 47-60) and a pair of levers 36 each of which are attached to a moving means 31 at one end and respectively attached to each of the holders 21 at their other ends (Bortolotti et al., col. 3, lines 11-22).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura in view of Yamamoto et al.

With respect to claim 1, Kimura discloses an apparatus for discharging a sheet except that it is not known to the examiner if the sheet is held by the holders without contacting a sheet on the tray. Kimura discloses an apparatus for discharging a sheet S onto a tray 26 including a holder 30. As can be seen in Figure 5 of Kimura, a sheet discharging through port 25 will be held in the slot 36 of the holder 30 over the tray 26. Kimura further discloses a moving means (not shown) for moving a pinion 52 which moves the holder 30 via rack 53. It is not clear if the sheet S is held in the holder 30 without contacting sheets that have already been printed and

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deposited in the tray 26. However, Yamamoto et al. teaches that it is known to hold a sheet above already printed sheets so that the printing on the already stacked sheet has time to dry. It would have been obvious to combine the teaching of Yamamoto et al. with the apparatus disclosed by Kimura for the advantage of allowing the ink on the sheet being held (held in a face-down manner) to dry a little longer before it contacts the back of the previously stacked sheet and thus preventing smearing of the ink.

With respect to claim 2, as mentioned above, Kimura discloses a rack 53 for moving the holder 30 and a driving means 52 for moving the rack 53. The rack moves perpendicularly to the sheet discharge direction as shown in Figures 4-5 of Kimura.

With respect to claim 3, the driving means 52 is a pinion as shown in Figure 4 of Kimura. Although a motor is not explicitly recited, the use of a motor for driving a pinion is an extremely well-known mechanical expedient used in automated devices such as printers that would have been obvious to one of ordinary skill in the art.

With respect to claim 9, Kimura discloses an apparatus for discharging a sheet except that it is not known to the examiner if the sheet is held by the holders without contacting a sheet on the tray. Kimura discloses an apparatus for discharging a sheet S onto a tray 26 including a pair of holders 30 and 31. As can be seen in Figure 5 of Kimura, a sheet discharging through port 25 will be held in the slots 36 of the holders 30 and 31 over the tray 26. Kimura further discloses a moving means (not shown) for moving a pinion 52 which moves the holders 30 and 31 via racks 53. It is not clear if the sheet S is held in the holders 30 and 31 without contacting sheets that have already been printed and deposited in the tray 26. However, Yamamoto et al. teaches that it is known to hold a sheet above already printed sheets so that the printing on the already stacked

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sheet has time to dry. It would have been obvious to combine the teaching of Yamamoto et al. with the apparatus disclosed by Kimura for the advantage of allowing the ink on the sheet being held (held in a face-down manner) to dry a little longer before it contacts the back of the previously stacked sheet and thus preventing smearing of the ink.

With respect to claim 10, as mentioned above, Kimura discloses a rack 53 which reciprocates perpendicularly to the sheet discharging direction and a driving means 52. The holders 30 and 31 move toward and away from each other in association with a movement of the rack 53.

With respect to claim 11, the driving means 52 is a pinion as shown in Figure 4 of Kimura. Although a motor is not explicitly recited, the use of a motor for driving a pinion is an extremely well-known mechanical expedient used in automated devices such as printers that would have been obvious to one of ordinary skill in the art.

6. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bortolotti et al. as applied to claim 20 above, and further in view of Yoshihara.

Bortolotti et al. discloses the claimed apparatus except for the holders not being exposed to the outside. However, Yoshihara teaches an apparatus with a discharge tray 70 that can be covered with a cover 81 as shown in Figure 5A of Yoshihara. It would have been obvious to combine the teaching of Yoshihara with the apparatus disclosed by Bortolotti et al. for the advantage of being able to stack other equipment on top of the apparatus and thus save space on a desktop or other surface.

Allowable Subject Matter

7. Claims 4-8, 12-18 and 23-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

Claims 23 and 24 have been indicated as containing allowable subject matter primarily for the first and second holders being connected to the moving means which comprises a rack.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kuwata et al. is cited to show another example of a sheet discharging apparatus with a sheet holder moved by a rack. Ogino and Shinmachi et al. are cited to show examples of a sheet discharging apparatus with sheet holders that move horizontally and perpendicularly with respect to the discharge direction of the sheet.

Response to Arguments

10. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

The newly cited patent to Yamamoto et al. teaches the limitation added to claims 1 and 9 regarding the sheet being held without contacting a sheet in the tray.

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With respect to claim 20, since applicant has removed the limitation regarding the rack, the allowable subject matter of the claim has been removed and the above prior art rejection has been made.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Colilla whose telephone number is (703) 308-2259. The examiner can normally be reached M-F, 8:30-5:30. Faxes regarding this application can be sent to (703) 746-4405.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached at (703)305-6619. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

October 1, 2003



Dan Colilla
Primary Examiner
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